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               E MACARIO A/AU
L1          126 S E3-7
               E DE MACARIO A/AU
L2           35 S E4-6
               E DEMACARIO A/AU
L3            2 S E4
L4            4 S L2-3 AND SLIDE
L5            0 S L2-3 AND (HOLDER OR MICROSAMPLE)
L6           11 S L1 AND (SLIDE OR HOLDER OR MICROSAMPLE)
L7           11 S MICROSAMPLE(1A)(HOLDER OR SUPPORT)
L8           22 S L4,L6-7

=> d 18 bib,ab 1-22

L8   ANSWER 2 OF 22  CA  COPYRIGHT 2001 ACS
AN   125:137043  CA
TI   Slide immunoenzymic assay (SIA)
AU   De Macario, Everly Conway; Macario, Alberto J. L.
CS   School Public Health, University Albany, Albany, NY, 12201-0509, USA
SO   Mol. Microb. Ecol. Man. (1995), 4.1.9/1-4.1.9/15.  Editor(s): Akkermans,
     Antoon D. L.; Van Elsas, Jan Dirk; De Bruijn, Frans J. Publisher: Kluwer,
     Dordrecht, Neth.
AB   The title method is described as it is performed with polyclonal antibody
     probed.

L8   ANSWER 3 OF 22  CA  COPYRIGHT 2001 ACS
AN   125:47859  CA
TI   Thin film sample support
IN   Turner, D. Clark; Nielsen, Andrew J.; Perkins, Raymond T.; Madden, Michael
PA   Moxtek, Inc., USA
SO   PCT Int. Appl., 16 pp.
PI   WO 9613708        A1   19960509       WO 1995-US13050  19951005
     US 5544218        A    19960806       US 1994-330719   19941028
PRAI US 1994-330719         19941028
AB   A holder for micro-samples for use with an anal. instrument relying on a
     beam of radiation or accelerated particles and a method for making the same
     is disclosed.  The holder includes a frame with one or more orifices
     covered by a thin polymer film.  One or more concave impressions are formed
     in the thin polymer film at the precise positions where samples can be
     placed to intersect a probe beam during anal.

L8   ANSWER 6 OF 22  CA  COPYRIGHT 2001 ACS
AN   112:153016  CA
TI   Adaptation of the slide immunoenzymic assay for quantification of DNA
     hybridization:  SIA-DNA
AU   Conway de Macario, Everly; Jovell, Robert J.; Macario, Alberto J. L.
CS   Wadsworth Cent. Lab. Res., New York State Dep. Health, Albany, NY,
     12201-0509, USA
SO   BioTechniques (1990), 8(2), 210-12, 214, 216-17
AB   A quant., non-radioisotopic microsystem was developed for measuring nucleic
     acid hybridization using microliter vols. of test sample and reagents.
     This new method, Slide Immunoenzymic Assay-DNA, is a modification of the
     Slide Immunoenzymic Assay technol. originally designated for quantifying
     antigens and antibodies.  It features small, circular solid phases
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(circles) of transparent material for nucleic acid immobilization. This allows the use of enzyme-labeled gene probes and substrates that generate color which, due to the distribution pattern of the circles on their support, can be measured by automated microtitration plate readers. Slide Immuoenzymic Assay-DNA was standardized to measure hybridization of probe to purified DNA or to DNA in cells lysed directly on the circles. Owing to its simplicity, relative low cost and expeditiousness, i.e., providing results in four hours. Slide Immunoenzymic Assay-DNA is also suitable for use in simple labs. and field studies.

L8 ANSWER 8 OF 22 CA COPYRIGHT 2001 ACS
AN 107:36050 CA
TI Multiple solid-phase system for storage of dry ready-for-use reagents and efficient performance of immunoenzymic and other assays
AU De Macario, Everly Conway; Jovell, Robert J.; Macario,Alberto J. L.
CS Sch. Public Health Sci., State Univ. New York, Albany, NY, 12201, USA
SO J. Immunol. Methods (1987), 99(1), 107-12 QR183.J6
AB A modular system of independent but matching solid phases coated with the reagents for the slide immunoenzymic assay (SIA) was developed. Antigen, antiserum, second antibody labeled with enzyme, glass slides. The reagents stay on the circles ready for use for at least 1 yr. Circles coated with the 2 reagents involved in each step of the assay are approximated to 1 another by pairing slides, 1 on top of the other. Hinged slide frames ensure exact superposition of circles with matching reagents sepd. by a gap 1 mm thick. This is occupied by a liq. column that forms from a 10-μL drop of water or buffer predeposited onto the circles of the bottom slide. The liq. bridge provides the milieu for interaction of reagents. Pairs of slides are incubated as needed for each step. The enzymic reaction of the last step is read with a vertical beam spectrophotometer. The same multiple-phase system can be used for immunofluorescence. Reactions occur faster using the system than when reagents are admixed in soln.

L8 ANSWER 10 OF 22 CA COPYRIGHT 2001 ACS
AN 105:170096 CA
TI Slide immunoenzymatic assay (SIA) in hybridoma technology
AU Conway de Macario, Everly; Macario, Alberto J. L.; Jovell, Robert J.
CS Wadsworth Cent. Lab. Res., New York State Dep. Health, Albany, NY, 12201, USA QP601, C72
SO Methods Enzymol. (1986), 121(Immunochem. Tech., Pt. I), 509-25
AB A review with 14 refs. Uses of SIA in hybridoma technol. in the study of monoclonal antibodies against bacteria, as an example, are presented. Samples are placed on a glass slide which is coated with an ultrathin layer of a hydrophobic substance except for 1 or more circles (reaction areas). Other reactants are added, and the results are detd. visually or spectrophotometrically. Samples as small as 5 μL can be processed in <1 h.

L8 ***ANSWER 11 OF 22*** CA COPYRIGHT 2001 ACS
AN 105:40651 CA
TI Slide immunoenzymic assay for human IgE (SIA-IgE)
AU Conway de Macario, Everly; Macario, A. J. L.; Jovell, R. J.
CS Wadsworth Cent. Lab. Res., New York State Dep. Health, Albany, NY, 12201, USA
SO J. Immunol. Methods (1986), 90(1), 137-41
AB A rapid and inexpensive method is described for detn. of human serum IgE using 5 μL samples. The slide immunoenzymic assay for IgE (SIA-IgE) is carried out on a glass slide in which up to 24 samples can be tested including controls and stds.; up to 4 of these slides can be read automatically in conventional vertical beam readers. Flat circles on the slide

are covered with a layer of biotinylated antibody specific for human IgE (trapping antibody). Five μL of serum sample is dropped to cover each circle, and the slide is incubated. The circles are washed with water, dried, incubated under 10 μL of enzyme-labeled antibody to human IgE, then washed again, and covered with 10 μL of enzyme substrate. The intensity of color generated is measured at the proper wavelength. The method is simple, accurate, and nonradioactive and can be completed within 2 h.

L8 ANSWER 12 OF 22 CA COPYRIGHT 2001 ACS
AN 103:175074 CA
TI The superficial antigenic mosaic of Methanobrevibacter smithii. Identification of determinants and isolates by monoclonal antibodies
AU De Macario, E. Conway; Macario, A. J. L.; Pastini, A.
CS Wadsworth Cent. Lab. Res., New York State Dep. Health, Albany, NY, 12201, USA
SO Arch. Microbiol. (1985), 142(4), 311-16
AB A panel of 6 different monoclonal antibodies (6A-F) was generated using M. smithii strain PS as immunogen. The antibodies were characterized and calibrated by std. techniques and with a novel application of the slide immunoenzymic assay (SIA) for detn. of the L-chain type of the monoclonal antibody mol. Five (and possibly 6) determinants were identified with the antibodies. Each antibody recognized 1 determinant exclusively, except for antibodies 6B and 6F which might recognize the same determinant, although some data suggest that antibody 6F recognizes a 6th determinant. The determinant for antibody 6A involves glutamate, lysine, and ornithine. It is most likely located in the region of the peptide moiety of pseudomurein which is typical of strain PS. The 6 antibodies reacted with whole bacterial cells unfixed or formalinized and(or) heat-fixed, but did not react with the other M. smithii ref. strain ALI, or with any other ref. methanogen tested. However, the antibodies did react with a no. of isolates from human feces considered to be M. smithii from morphol., physiol., and immunol. information, and were instrumental for grouping the isolates.

L8 ANSWER 13 OF 22 CA COPYRIGHT 2001 ACS
AN 103:158609 CA
TI Antibodies for methanogenic biotechnology
AU Macario, Alberto J. L.; Conway de Macario, Everly
CS Wadsworth Cent., New York State Dep. Health, Albany, NY, 12201, USA
SO Trends Biotechnol. (1985), 3(8), 204-8
AB A review with 29 refs. Antibody probes have been developed for identifying methanogens in complex microbial mixts. including those found in fermenters. Identification is accomplished by a set of complementary micromethods each requiring 10 μL sample and all carried out on small circular reaction areas on a single glass-slide designed for immunol. testing, differential staining and microscopic examn. of microbes.

L8 ANSWER 14 OF 22 CA COPYRIGHT 2001 ACS
AN 103:67622 CA
TI The slide immunoenzymic assay: a simple laboratory tool with multiple applications
AU De Macario, Everly Conway; Jovell, Robert J.; Macario, Alberto J. L.
CS Wadsworth Cent. Lab. Res., New York State Dep. Health, Albany, NY, 12201, USA
SO BioTechniques (1985), 3(2), 138-40, 142-5
AB A slide immunoenzymic assay (SIA), which is capable of detecting either antigen or antibody, was developed; the assay can be performed rapidly and accurately by using only 5 μL vols. of sample and reagents. All reactions and measurements take place on a slide having flat, transparent circular

areas, each 3 mm in diam. and surrounded by a thin layer of hydrophobic material. SIA enables: (a) antibody/antigen measurement in <1 h, (b) negligible background signal due to the geometry of the reaction area, (c) automated spectrophotometric and fluorometric measurements without disturbing the reactants, (d) use of small vols. of both sample and reagents, (e) the detection of target mols. present at low concns., and (f) microscopic examn. of particulate antigens in the reaction area. The SIA is particularly useful for screening monoclonal antibody-producing hybridoma cultures; measuring antibacterial antibodies in biol. fluids such as serum and exudates; detecting antibody or antigen in column fractions; and identifying unknown microbial species by using defined antibody probes.

L8 ANSWER 15 OF 22 CA COPYRIGHT 2001 ACS
AN 96:83809 CA
TI Specific antisera and immunological procedures for characterization of methanogenic bacteria
AU Conway de Macario, Everly; Macario, Alberto J. L.; Wolin, M. J.
CS Div. Lab. Res., New York Dep. Health, Albany, NY, 12201, USA
SO J. Bacteriol. (1982), 149(1), 320-8
AB Specific antisera were raised in rabbits to 19 methanogenic bacteria representing the species available in pure culture at the present time. The antisera were characterized, labeled, and organized in a bank to serve as a source of material for prepn. of antibody probes and thus provide standardized reagents for immunol. anal. of methanogens. An indirect immunofluorescence procedure was standardized for optimal staining of homologous and heterologous bacterial strains. Two immunoenzymic assays were developed: (1) a simple slide assay, useful for rapid antibody detection in small samples, antibody titrns., and disclosure of cross-reactions among methanogens, and (2) a quant. method. The latter is useful for quantification of antigenic relatedness. Procedural details were developed to obtain optimal bacterial prepns. for use as immunogens to raise antibodies in vivo, and as antigens for antibody assay in vitro.

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FILE 'CA' ENTERED AT 06:57:16 ON 10 DEC 2001
L1 73 S SLIDE(7A)(CIRCLE OR HOLE OR OR!FICE)
L2 4329 S PLATE(7A)(CIRCLE OR HOLE OR OR!FICE)
L3 190 S HOLDER(7A)(CIRCLE OR HOLE OR OR!FICE)
L4 999 S L2 AND(SAMPLE OR MICROSAMPLE OR LIQUID)
L5 41 S L2 AND SURFACE(1A)TENSION
L6 3552 S (SLIDE OR PLATE OR HOLDER)(7A)(CIRCULAR OR OPENING)
L7 799 S L6 AND(SAMPLE OR MICROSAMPLE OR LIQUID)
L8 21 S L6 AND SURFACE(1A)TENSION
L9 63 S L3 AND(SAMPLE OR MICROSAMPLE OR LIQUID)
L10 0 S L3 AND SURFACE(1A)TENSION
L11 1738 S L4,L7
L12 701 S L11 AND(DETECT? OR DETERMIN? OR ANALY? OR MONITOR? OR MEASUR? OR TEST?)
L13 33 S L9 AND(DETECT? OR DETERMIN? OR ANALY? OR MONITOR? OR MEASUR? OR TEST?)
L14 5 S L12 AND NANO?
L15 7436 S (SAMPLE OR LIQUID OR MICROSAMPLE)(7A)(CIRCLE OR HOLE OR OR!FICE OR OPENING)

L16 155 S L12 AND L15
L17 13 S L12 AND L15(4A)(LOAD? OR INSERT? OR RETAIN? OR HOLD?)
L18 18 S L16 AND(IMAG? OR SPECTRO? OR PHOTOMET? OR CHIP OR MICROCHIP)
L19 195 S L1,L5,L8,L13-14,L17-18
L20 165 S L19 NOT PY>1997
L21 30 S L19 NOT L20
L22 19 S L21 AND PATENT/DT
FILE 'BIOSIS' ENTERED AT 07:17:02 ON 10 DEC 2001
L23 40 S L20
FILE 'MEDLINE' ENTERED AT 07:18:41 ON 10 DEC 2001
L24 27 S L20
FILE 'CA' ENTERED AT 07:19:47 ON 10 DEC 2001
E CONWAY DE/AU
L25 7 S E4-5 AND(SLIDE OR MICROSAMPLE OR MICRO SAMPLE OR SAMPLE(3A)(HOLDER OR SUPPORT)
FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 07:23:19 ON 10 DEC 2001
L26 229 DUP REM L20 L22 L25 L23 L24 (29 DUPLICATES REMOVED)

=> d 126 bib,ab 1-229

L26 ANSWER 8 OF 229 CA COPYRIGHT 2001 ACS
AN 133:249315 CA
TI Multiple-through-hole testing plate for high throughput screening
IN Schellenberger, Volker; Liu, Amy Deming
PA Genencor International, Inc., USA
SO PCT Int. Appl., 33 pp.
PI WO 2000056456 A1 20000928 WO 2000-US7140 20000317
US 6027873 A 20000222 US 1999-272122 19990319
PRAI US 1999-272122 A 19990319
AB A testing plate is described having a pair of opposing surfaces and a plurality of through-holes for holding samples for anal. Each of the holes extends from one surface to the other, being arranged in groups, where each group is arranged in sets having at least two rows and two columns of holes. To analyze samples, at least one of the surfaces of the plate is immersed in a soln. to be analyzed. A portion of the soln. enters openings for each of the holes in the immersed surface. Once the holes are filled with soln., the testing plate is removed and is held above a supporting surface. Surface tension holds the soln. in each of the holes. The soln. in one or more of the holes is then analyzed and the soln. in one of these holes is identified for further study. The location of the identified soln. is marked based upon its location within a particular set and group of holes.

L26 ANSWER 20 OF 229 CA COPYRIGHT 2001 ACS
AN 127:356743 CA
TI Test plate for immunostaining and microscopic observation comprising slide plate and multiwell cover and test method
IN Kurai, Naoki; Matsuda, Tomomasa; Kawamura, Masahide; Kuroda, Takashi; Ono, Tetsuya
PA Dainippon Ink and Chemicals, Inc., Japan; Deitsuku Molding K. K.; Nippon DPC Corp.
SO Jpn. Kokai Tokkyo Koho, 14 pp.
PI JP 09281106 A2 19971031 JP 1996-88151 19960410
AB The test plate includes a slide plate and a detachable upper member which has multiple perforated holes, each hole of which has a projection comprising a sealing material around the edge of the hole so that sep. compartments are formed when the upper member is attached to the slide plate. The test is performed by (1) detaching the slide plate from the

test plate, (2) mounting a test sample on the slide plate, (3) reattaching the slide plate to the upper member, (4) injecting a labeled antibody or a staining soln. into the holes and washing, optionally followed by injecting a staining substrate and washing, (5) injecting an embedding agent into the holes, and (6) detaching the slide plate from the test plate for microscopic observation. The test plate makes automatization of processes possible prior to microscopic observation in direct and indirect fluorescent antibody techniques and direct and indirect enzyme-labeled antibody techniques.

L26 ANSWER 41 OF 229 CA COPYRIGHT 2001 ACS
AN 123:5108 CA
TI method and apparatus for detection of cytokines after capillary electrophoresis
IN Suzuki, Kazuo; Sato, Takashi
PA Betsukuman Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
PI JP 07098319 A2 19950411 JP 1993-263084 19930928
AB A method. for detection of cytokines (interleukins) after capillary electrophoresis involves: drawing the sepd. samples from the capillary tube, contacting the samples with cells (e.g. lymphocytes) that change the morphol. when contacted withe the samples, introducing the treated cells together with electrolytes into a hole-contg. slide, and examg. under microscopy. The device for the cytokine detection is described.

L26 ANSWER 109 OF 229 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1984:299167 BIOSIS
TI SLIDE IMMUNO ENZYMATIC ASSAY FOR IMMUNO GLOBULIN ISOTYPE.
AU CONWAY DE MACARIO E; MACARIO A J L; JOVELL R J
CS CENT. FOR LAB. AND RES., NEW YORK STATE DEP. OF HEALTH, ALBANY, NY 12201, U.S.A.
SO J IMMUNOL METHODS, (1984) 68 (1-2), 311-318.
AB A simple method is described for rapid determination of [mouse] Ig class and subclass in an assortment of samples based on the slide immunoenzymatic assay (SIA-Ig). Each circle on a multi- circle glass slide is coated with [goat, rabbit or sheep] anti-Ig class or subclass antibody. For each isotype to be assayed a circle is coated with its specific anti-isotype. The coated circles are incubated with sample containing the Ig of unknown isotype and are then washed. The slide is then incubated with enzyme-labeled anti-Ig and washed again. Finally, enzyme substrate is deposited onto the circles. Color appears within a few minutes only on the circle where the unknown was bound specifically by its corresponding anti-isotype antibody. The method reveals correctly the isotype of the constituents of complex mixtures, such as serum, as well as that of the only component of samples containing a single molecular species of Ig (e.g., monoclonal antibodies). The method is simple, reliable, gives results in < 1 h and is adequately sensitive for a wide range of practical applications.

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